Exhibit A



VIA E-MAIL

Hon. James Gennaro Chair Environmental Protection Committee NYC City Council

Re: – November 17, 2021 Environmental Protection Committee testimony

Dear Chair Gennaro:

I am Bill Nowak, Executive Director of NY-GEO, the New York Geothermal Energy Organization, the statewide organization for geothermal heat pump installers and other geothermal stakeholders.

Regarding bill 2091 -The Building Electrification study

NY-GEO completely supports this bill and would be very interested in providing input on geothermal's value in electrifying heating without adding to peak demand and stressing the grid. It was good to hear Director Furnas's enthusiasm for the efficiency of air source heat pumps. He'll be even more impressed with the performance of ground source heat pumps, which are significantly more efficient than air source especially, on the hottest and coldest days of the year when the grid is most vulnerable. This goes directly to Councilmember Ampry-Samuel's question, and the points others have raised, about the electricity supply.

Regarding bill 2196 The Gas Stove bill

In my house we're loving our all-electric induction oven and urge you to pass this bill without delay. Contrary to earlier testimony induction ovens and cooktops are more efficient than electric resistance and far better for the climate than gas burners.

Regarding bill 2317 - On a Building Emissions standard

The Writing on the Wall Needs to be Clear for Everyone to See – New York's construction and housing markets need clear signals on how and when it will be necessary to reduce GHG emissions. There is currently too little awareness, as new buildings are going up and old buildings rehabbed, that fossil fuel heating is approaching obsolescence and may need to be replaced at significant costs sooner, rather than later. The clearest way to send this message is to establish a timetable for the transition to renewable heating and cooling. New York's approach to market competitiveness for renewable heating will include several elements including giving and taking away carrots and employing sticks. With the climate emergency, the time for signaling the use of sticks is upon us.

The transportation sector has seen recent announcements in California, New York other jurisdictions bans on gas powered cars certain dates. This provides a significant market signal that the end is within sight for climate polluting vehicles. Now that CLCPA standards for GHG emissions are in place, NYSERDA has declared that the heating sector is co-equal to transportation as the largest source of GHG emissions in the NYS economy. Because of the relative importance of the heating sector in New York's climate, New York City has a golden opportunity to make an internationally significant policy announcement in the heating sector.

Without distinct writing on the wall, it is not clear that any amount of cost cutting or education will jar the market out of doing things the way it's always been done. NY-GEO is aware of geothermal heat pump proposals, even for tall downstate buildings, that were cost competitive but rejected, seemingly on the basis of familiarity more than anything else. The market is currently comfortable with fossil fuel heating and needs a strong signal to move that comfort in another direction.

We also face an enormous challenge transforming the HVAC industry itself to one that is working to meet our climate challenges. A clear set of end dates will be very helpful in turning the attention of HVAC stakeholders to the transition to fossil-fuel free heating. New York State has a more than adequate supply of HVAC contractors capable of installing heat pumps with a small amount of training. What is needed is a market signal that their skills will be needed installing a slightly different set of equipment with far higher environmental benefits. It's important to think of the jobs that will be created. Heat pumps, especially geothermal heat pumps take more labor to install than fossil fuel systems. We urge our friends in the labor movement to look at the big picture, embrace the necessary change that is coming and start accessing the tens of thousands of jobs that will be created in this transition by bills like 2317.

Thank you Councilmembers Gennaro, Ampry-Samuel and Levin for your leadership on these initiatives

Sincerely,

Bill Nowak

Executive Director, NY-GEO

716-316-7674

nygeoinfo@gmail.com

Bill Nowak

The New York Geothermal Energy Organization (NY-GEO) is a non-profit trade organization representing geothermal heat pump (GHP) installers, manufacturers, distributors, drillers, consultants and industry stakeholders from throughout New York State and beyond.

From: From NY-GEO <nygeoinfo@gmail.com>
Sent: Friday, November 19, 2021 8:33 AM

To: Testimony; Swanston, Samara; Samuel, Alicka

Subject: [EXTERNAL] Fwd: REPLY: Follow up for 2021 11 17 Environmental Protection Committee

Dear Chair Gennaro

I write to follow up on our discussion in Wednesday's hearing.

I want to make it clear that NY-GEO strongly supports passage of Councilmember Ampry-Samuel's bill #2317.

We believe that both air source and ground source heat pumps belong in the mix as New York electrifies its heating sector. We also believe emphasizing and enabling ground source wherever possible will pay off in the long run.

To meet our climate goals it is crucial that we stop putting up fossil fuel buildings as quickly as we can. These buildings will be polluting long after NY's 2030 and 2050 climate mandate dates.

We urge you to pass 2317 as quickly as possible with the strongest possible provisions.

Regarding #2091, we can't afford to put off action on stopping fowwil fuel construction, but once electrification is the standard, we're happy to do all we can to help New York go with the most efficient form of heat pumps wherever possible.

Thank you.

Bill Nowak Executive Director NY-GEO (Geothermal Energy Organization)

[&]quot;We may be the only species to die off because it wasn't cost effective to save ourselves...or so we thought." credit: Becky Merton through Bill Martin, President California Geothermal Heat Pump Association

[&]quot;You must stop pretending that we can solve the climate and ecological crisis without treating it as a crisis." Greta Thunberg through Bill McKibben

[&]quot;...the most important year for reducing emissions will always be 'this year." Rocky Mountain Institute